

1956 ILLINOIS CORN TESTS

Variety performance



Location of
1956 test
fields

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1956 ILLINOIS CORN TESTS

By EARL R. LENG and DON E. FINLEY¹

THE LARGEST CORN CROP in Illinois' history was harvested in 1956. Official estimates placed total production at nearly 600 million bushels, more than 30 million above the previous production record set in 1948. The estimated average yield for the state was 68 bushels per acre, 12 bushels above the 1955 average and 7 bushels higher than the 1948 record.²

PLAN OF THE TESTS

Number of hybrids and their sources. Three hundred fifty-two hybrids were grown on seven major test fields. Fifty-five companies and individuals and the Illinois Agricultural Experiment Station furnished seed for the tests. Both the number of hybrids grown and the number of companies and individuals furnishing seed were substantially greater than in the past few years of the tests.

One hundred twenty-five hybrids were grown at Galesburg and Urbana. One hundred entries were tested at DeKalb and Ashkum, and ninety hybrids were included in the test at Greenfield. Eighty-one hybrids were tested at Brownstown, and seventy-two at Wolf Lake. The test fields at Ashkum and Greenfield were new locations, intended to represent major corn-growing areas of the state which had not been adequately covered by the previous testing program. General information on the seven tests is summarized in Table 1.

A representative of the Illinois Station or of the Illinois Crop Improvement Association collected seed for planting the test fields directly from the warehouses of the producers entering the respective hybrids. Seed of certain Illinois and other open-pedigreed hybrids was furnished by the Illinois Station.

Selection of entries. Each year producers of hybrid seed corn are given an opportunity to nominate hybrids for testing on the various fields. A fee is charged for testing hybrids nominated in this manner. In the past two years, all hybrids nominated for testing have been accepted and included in the performance test plots.

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² Estimates of yield for the state were furnished by the Illinois Cooperative Crop Reporting Service, Illinois State Department of Agriculture cooperating with the U.S. Department of Agriculture.

Certain hybrids were also included in the tests to meet the field-performance requirements for certification. Some Station-produced open-pedigreed hybrids were included at each location, and several promising experimental hybrids were grown at some locations. The performance of additional experimental hybrids in 1956 and preceding years is reported in Illinois Bulletin 606.

**Table 1. — GENERAL INFORMATION:
Illinois Hybrid Corn Tests, 1956**

Field, county, location and number of entries	Date planted	Date harvested	Average acre yield	Moisture in grain	Erect plants	Stand
			<i>bu.</i>	<i>percl.</i>	<i>percl.</i>	<i>percl.</i>
DeKalb: DeKalb, N. 100.....	May 22	Oct. 23	117.3	18.7	97	87
Galesburg: Knox, WNC, 125.....	May 11	Oct. 20	124.0	14.9	93	87
Ashkum: Iroquois, ENC, 100.....	May 19	Oct. 16	123.8	17.8	97	91
Urbana: Champaign, EC, 125.....	May 9	Oct. 17	127.8	15.6	95	90
Greenfield: Macoupin, WSC, 90.....	May 12	Oct. 11	121.8	13.8	99	92
Brownstown: Fayette, S. 81.....	June 4	Nov. 1	95.3	16.7	98	89
Wolf Lake: Union, Ex. S. 72.....	May 4	Oct. 23	104.5	14.3	99	83

COOPERATORS: RALPH ANDERSON and RALPH HAWTHORNE, *Knox county*; D. L. PETERSON, *Iroquois county*; CHARLES ROSS, *Macoupin county*; EARL SCHWARM and H. O. LEWIS, *Fayette county*; SHAWNEE HIGH SCHOOL, *Union county*. Tests in *DeKalb* and *Champaign counties* were located on University of Illinois farms managed by R. E. BELL and C. H. FARNHAM. P. E. JOHNSON, Assistant Professor of Soil Fertility, supervised field operations on the test in *Fayette county*.

Soil characteristics of fields. The test fields are usually medium to high in productivity, and each represents a soil type common to the region where it is located. Each field is selected for uniformity in soil type, productivity, and drainage. Approximate locations of test fields are shown on the map on the cover. Soil characteristics and management are described in Table 2.

Field-plot design. The experimental designs used at DeKalb and Ashkum were 10×10 lattices, with 3 replications each. A 9×9 lattice-square design with 5 replications was used at Brownstown. The designs used at Galesburg and Urbana were $5 \times 5 \times 5$ cubic lattices, with 3 replications each. A 9×10 rectangular lattice with 3 replications was used at Greenfield, while the design at Wolf Lake was an 8×9 rectangular lattice with 3 replications. Because of time limitations, the data presented in this bulletin for all tests except Brownstown were analyzed by the procedure normally used for randomized block tests, rather than by the full procedure for rectangular or cubic lattices.

Method of planting. All test fields were planted by hand on land prepared in the normal way for corn. Individual plots consisted of 2 rows each 5 hills long. Four kernels were planted per hill at DeKalb,

Ashkum, Galesburg, and Urbana; 3 kernels were planted per hill at Greenfield, Brownstown, and Wolf Lake. The plots were not thinned.

GROWING CONDITIONS

The 1956 growing season in Illinois was exceptionally favorable for corn. Moisture shortages were evident in the central and western sections during May and June, but timely rains and cool temperatures during July and early August provided favorable conditions which led to record yields. An unusually early killing frost extended over much of the northern half of the state on September 19 and 20, but nearly all corn was safely matured by that time, and no loss in yield resulted. The cool period in mid-September was followed by several weeks of exceptionally dry and warm weather, which resulted in rapid drying of the corn crop, and in unusually low moisture content of the grain at harvest. Harvest throughout the state was completed several weeks ahead of the normal schedule.

Seedbeds for the performance tests were generally in excellent condition, except at Galesburg and Brownstown, and planting was timely, except at Brownstown. The seedbed at Galesburg was cloddy and dry at planting time, but ample rains fell soon after planting, and stands were generally good. Planting at Brownstown was again delayed until the first week in June because of excessive soil moisture. Moisture supplies and general growing conditions in July and August were exceptionally favorable at all locations, although a slight deficiency of moisture was evident late in the growing season at Brownstown and Wolf Lake.

The low temperatures on September 19 and 20 killed the majority of the plants in the DeKalb and Ashkum test fields, and also caused obvious frosting at Galesburg. No apparent reduction in yield resulted from this frost, since maturity was well advanced in all tests. Subsequently drying conditions were exceptionally favorable, and moisture content of the grain at harvest was unusually low at all test locations.

Damage by insect pests and plant diseases was light to moderate on the test plots in 1956. Moderate infestations by the European corn borer were evident in the four northernmost test fields but resulted in very little stalk breakage or ear droppage. The leaf blight phase of Stewart's disease was evident at Greenfield and Brownstown, but appeared to cause little if any reduction in yield. Stalk rots were prevalent in most of the test fields, but very little stalk-breaking resulted at any test location.

Table 2. — TEST FIELDS: Soil Characteristics, Management Practices, and Rainfall in 1956

Soil type	Lime require- ment	Available phosphorus	Available potassium	Previous crops, soil manage- ment, and rainfall ¹
NORTHERN: DeKalb				
Flanagan silt loam	ions 0	High	Very high	Alfalfa and ladino 1951; corn 1952; oats 1953; red clover 1954; corn 1955; 400 pounds 0-10-30 plowed down; 250 pounds ammonium nitrate side-dressed; 3 tons limestone 1954. Rainfall (inches): May 4.50; June 2.50; July 5.07; August 5.20.
WEST NORTH-CENTRAL: Galesburg				
Sable silty clay loam	2	High	Very high	Alfalfa 1951; corn 1952; corn 1953; oats 1954; alfalfa 1955; 800 pounds rock phosphate plowed down; 2 tons limestone 1954; 2 tons manure plowed down. Rainfall (inches): May 4.42; June 4.28; July 9.31; August 5.89.
EAST NORTH-CENTRAL: Ashkum				
Pella clay loam	0	High	High	Alfalfa and brome 1951; corn 1952; corn 1953; oats 1954; alfalfa and brome 1955; 400 pounds 10-10-10 in 1954; 3 tons manure plowed down fall 1955; 100 pounds ammonium nitrate side-dressed. Rainfall (inches): May 6.55; June 1.33; July 3.63; August 3.27.
EAST-CENTRAL: Urbana				
Brenton silt loam	2	Low	High	Oats 1951; legumes (none removed) 1952; corn 1953; oats 1954; legumes (none removed) 1955; 2,300 pounds rock phosphate plowed down; 400 pounds 0-0-60 plowed down; 3 tons limestone. Rainfall (inches): May 2.92; June 1.89; July 5.82; August 3.79.
WEST SOUTH-CENTRAL: Greenfield				
Herrick silt loam	1-2	Medium	Medium	Corn 1951; soybeans 1952; oats 1953; alfalfa pasture 1954; alfalfa pasture 1955; 2½ tons limestone 1949; 200 pounds 4-16-16 plowed down before planting. Rainfall (inches): May 4.21; June 3.64; July 3.65; August 6.94.
SOUTHERN: Brownstown				
Cisne silt loam	2	High	High	Oats and clover 1951; corn 1952; oats and clover 1953; corn 1954; oats and clover 1955; 200 pounds ammonium nitrate side-dressed at second cultivation; limestone and rock phosphate added in the past. Rainfall (inches): May 5.21; June 3.11; July 4.00; August 3.02.
EXTREME SOUTHERN: Wolf Lake				
Probably Riley fine sandy loam	0	High	High	Corn 1951; corn 1952; soybeans 1953; wheat and clover 1954; corn 1955; 150 pounds 4-16-16 plowed down; 120 pounds anhydrous ammonia in the row at planting. Rainfall (inches): May 3.46; June 3.69; July 4.09; August 1.53.

¹ Official rainfall data furnished by Illinois State Climatologist, data obtained from U.S. Weather Bureau publication, "Climatological Data for Illinois."

MEASURING PERFORMANCE

The entries of the 1956 test are listed in the tables in alphabetical order. It is hoped this arrangement will reduce the emphasis often placed on yield alone.

Yield of grain. To determine shelling percentage, all the ears from one replicate of each entry were shelled immediately after harvest. From the well-mixed shelled corn one sample was taken to determine the percentage of moisture at harvest.¹

The total acre-yield was calculated as shelled corn containing 15.5 percent moisture, the upper limit allowable in No. 2 corn. The total yield thus obtained for the Brownstown test was adjusted according to the procedure outlined by Cochran for randomized lattice-square designs.²

Erect plants. The percentage of erect plants in each plot of each entry on each field was estimated at the time of harvest. Lodging may have been due to rootworm damage, weak or rotted roots, corn-borer damage, stalk rots, or weak stalks. Stalks broken above the ear were not considered lodged.

Dropped ears. At harvest time, the number of dropped ears in each plot was recorded in the Galesburg and Urbana tests. Ear-dropping may have resulted from European corn-borer damage or from other causes. There were very few dropped ears in the other test fields, and so data on this characteristic were not recorded. The percentage of dropped ears was calculated by dividing the number of dropped ears in a given plot by the number of plants in that plot.

Stand. A count was made in late summer, at all fields, of the number of missing hills and number of missing plants in each plot of each variety. It is assumed that missing hills were due to some factor other than the hybrid itself. Yields were corrected for missing hills by the following adjustment:

$$\text{Ear weight in field} \times \left(1 + \frac{\text{missing hills}}{\text{hills present}} \times .6 \right) = \text{adjusted ear weight.}$$

The percent stand is based on the total number of missing plants in relation to the number that would have been present if all the kernels had produced plants. Stand differences may be due to poor germina-

¹ All moisture determinations were made with a Radson moisture tester.

² Cochran, W. G. "Some Additional Lattice-Square Designs." *Iowa Agr. Exp. Sta. Res. Bul.* 318. May. 1943.

tion, to disease, insect, or rodent destruction, or in some cases to destruction in cultivation.

Readers are urged to keep in mind these two things when comparing the performance of hybrids on any one field:

1. Small differences in any one year do not necessarily indicate that one hybrid is inherently superior to another. In comparing the performance of two hybrids, figures may be obtained representing the range which differences between two entries must exceed before they can be considered significantly different. The method used in determining this value is called the "Multiple Range test."¹ This method considers the number of entries that fall within the range as well as the variability of the test. It has been used in presenting the data from the tests discussed in this bulletin (Tables 3 to 9, inclusive). In each of these tables, the performance of the highest-yielding hybrid and of *all entries not significantly different from it in yield* are shown in boldface type. For each characteristic other than yield, the "difference necessary for significance" or "least significant difference" has been computed in the conventional manner.

2. Tests covering three years (see upper part of yield tables) give more reliable results than those covering only one year. The fact that a hybrid does not appear in the summary is, however, nothing against it — its absence merely means that 1956 was the first year it was tested or that it missed one year of the series.

¹ DUNCAN, D. B. "Multiple Range and Multiple F Tests." *Biometrics* 11, (1), 1-43. 1955.

Table 3.—NORTHERN ILLINOIS: DeKalb

(Performance data of highest-yielding hybrid and of all hybrids
not significantly lower in yield are shown in boldface type)

Entry	Total acre yield	Moisture in grain at harvest	Erect plants	Stand
SUMMARY: 1954-1956				
	<i>bu.</i>	<i>percl.</i>	<i>percl.</i>	<i>percl.</i>
Hulting 238.....	113.0	21.4	91	92
Pioneer 354.....	110.7	21.5	96	88
P.A.G. 277.....	109.5	21.5	89	91
Sieben S-340.....	109.2	22.7	94	91
Frey 410.....	109.1	23.2	94	88
P.A.G. 244.....	108.8	21.9	91	90
Holmes 11A.....	108.7	21.1	95	89
Huebsch 81.....	108.6	21.6	94	91
Doubet D-45.....	108.2	22.1	96	87
P.A.G. 234.....	108.2	22.2	93	89
Producers 326.....	107.9	20.5	94	89
Producers 510.....	107.8	22.5	94	92
Pioneer 325.....	107.4	22.4	96	92
Stewart S-56.....	107.2	22.6	93	86
Bear OK-414.....	106.8	21.4	96	86
Hulting 240.....	106.6	22.8	95	85
P.A.G. 222*.....	106.5	21.8	95	90
Crow's 402.....	106.4	22.0	94	82
Munson M5.....	106.3	22.7	90	89
Super-Crost 440.....	105.9	22.8	91	83
P.A.G. 253.....	105.2	22.1	87	89
Nichols NB-75A.....	104.9	22.0	94	88
Sieben S-560.....	103.7	22.5	96	84
Pioneer 347.....	103.6	21.4	91	88
Sieben S-440E.....	103.4	22.0	90	84
Crow's 487.....	103.3	20.9	95	87
Stiegelmeier S-379.....	103.0	20.7	92	91
Huebsch 24.....	102.8	20.4	94	89
Munson M77.....	102.3	22.9	92	86
Ainsworth X-12.....	102.0	22.8	97	83
Illinois 101 (Huebsch).....	101.4	22.5	92	89
Crow's 260.....	100.9	21.9	94	83
Crow's 432.....	100.1	21.9	97	86
Moews 15.....	100.1	20.7	94	89
Sieben S-450.....	96.8	20.9	96	85
Average of all entries.....	105.6	21.9	94	88
Difference necessary for significance.....	11.2	2.1	5.3	8.3
1956 RESULTS				
Ainsworth X-12.....	108.2	21.0	100	72
Bear OK-414.....	112.3	18.0	99	81
Crow's 260.....	111.6	18.8	100	74
Crow's 402.....	120.4	17.4	96	84
Crow's 432.....	108.5	18.6	100	80
Crow's 487.....	111.4	17.7	97	80
DeKalb 409.....	117.9	16.8	97	89
DeKalb 410.....	115.4	15.7	96	89
DeKalb 414.....	118.3	18.6	100	87
DeKalb 423.....	126.5	18.4	99	93
DeKalb 450.....	119.0	17.8	99	88
DeKalb 459.....	118.8	18.5	96	91
DeKalb 603.....	114.9	18.4	100	82
DeKalb 623.....	104.6	21.2	99	91
DeKalb 627.....	121.0	17.4	92	85
DeKalb 630.....	115.6	20.3	97	88
Doubet D-25E.....	117.2	18.8	99	91
Doubet D-45.....	119.2	18.8	99	85
Frey 410.....	119.0	19.3	92	78
Funk's G-75A.....	122.9	18.8	100	85
Funk's G-76.....	113.5	19.5	94	85
Holden H-348.....	128.6	17.7	98	97
Holmes 11A.....	116.8	18.0	100	82
Holmes 17A.....	116.9	17.7	99	85
Holmes 47.....	120.8	20.4	98	78
Huebsch 24.....	119.3	18.0	96	95
Huebsch 44.....	135.4	18.0	92	98
Huebsch 81.....	130.5	16.8	96	94

* Average of P.A.G. 7220 in 1954, and P.A.G. 222 in 1955 and 1956.

(Table is concluded on next page)

Table 3. — NORTHERN ILLINOIS: DeKalb — concluded

Entry	Total acre yield	Moisture in grain at harvest	Erect plants	Stand
1956 RESULTS — concluded				
	<i>bu.</i>	<i>perct.</i>	<i>perct.</i>	<i>perct.</i>
Hulting J-46.....	115.5	19.2	91	97
Hulting 238.....	125.3	16.5	94	94
Hulting 240.....	126.2	19.0	99	76
Hulting 242.....	112.7	19.0	99	92
Hulting 481.....	112.9	20.4	98	87
Hulting 681.....	105.3	17.4	99	86
Illinois 101 (Huebsch).....	124.4	18.1	95	96
Illinois 1277 (Coldwater).....	124.0	16.8	95	90
Illinois 1277 (Nichols).....	110.9	19.4	97	87
Illinois 1280 (Coldwater).....	101.5	16.7	87	82
Illinois 1902 (Station).....	117.6	18.6	94	83
Moews 14DR.....	120.4	17.6	97	91
Moews 15.....	111.0	16.6	96	98
Moews 16.....	119.2	16.8	98	80
Moews 48.....	120.5	17.7	99	93
Moews 524A.....	114.2	20.6	98	79
Moews 5074.....	114.5	20.4	97	95
Moews 5076.....	107.4	19.0	98	93
Moews 5077.....	123.4	19.6	98	91
Moews 5078.....	116.0	20.7	97	95
Munson M5.....	117.9	19.0	96	88
Munson M77.....	109.7	19.5	98	84
Nichols NB-5C.....	124.1	16.4	97	97
Nichols NB-43.....	124.1	18.4	94	89
Nichols NB-75A.....	115.3	17.8	98	85
P.A.G. 222.....	119.2	16.8	98	92
P.A.G. 225.....	121.5	17.1	97	85
P.A.G. 234.....	119.2	19.0	97	85
P.A.G. 244.....	126.0	17.4	98	89
P.A.G. 253.....	119.5	19.7	83	88
P.A.G. 277.....	123.8	18.5	96	92
P.A.G. 290.....	109.6	16.5	97	88
P.A.G. 8401.....	109.1	18.3	98	85
P.A.G. 8892.....	123.5	18.3	96	97
Pioneer 325.....	121.5	19.2	98	91
Pioneer 344.....	121.6	18.0	95	88
Pioneer 345.....	123.1	17.2	93	92
Pioneer 346.....	124.6	17.5	96	94
Pioneer 347.....	114.8	18.0	98	86
Pioneer 352.....	116.5	16.1	97	79
Pioneer 354.....	118.4	18.3	98	90
Pioneer 371.....	114.8	16.2	98	89
Pioneer 1091.....	134.1	17.8	98	93
Producers 326.....	123.9	18.1	93	92
Producers 505.....	113.2	19.4	95	92
Producers 510.....	120.2	18.3	96	93
Sieben S-340.....	116.7	19.8	97	91
Sieben S-440.....	118.2	18.4	98	88
Sieben S-440E.....	116.0	18.8	88	82
Sieben S-450.....	99.3	19.2	98	85
Sieben S-560.....	118.2	19.5	99	84
Steckley Genetic Giant 3.....	107.5	17.8	97	84
Steckley Genetic Giant 4.....	116.9	16.5	97	82
Steckley Genetic Giant 9.....	108.4	17.4	95	72
Steckley Genetic Giant 10.....	116.0	18.2	94	79
Stewart S-56.....	112.7	18.8	98	82
Stewart S-60.....	127.1	19.8	97	89
Stewart S-66B.....	109.9	18.0	96	86
Stiegelmeier S-379.....	116.4	18.5	94	93
Super-Crost 440.....	118.6	17.8	94	83
Tiemann T-68.....	120.1	17.4	100	74
Tiemann T-78.....	117.3	17.3	99	58
Trisler T-19B.....	120.0	18.5	99	87
Tomahawk 43.....	120.8	16.8	95	82
Tomahawk 62.....	111.7	17.2	93	79
Tomco 619.....	123.2	20.2	99	90
Tomco 678.....	116.8	20.7	97	90
United-Hagie UH-41A.....	115.9	19.3	98	94
United-Hagie UH-52B.....	115.4	16.6	96	85
Wyckoff's W-20.....	120.9	21.0	98	93
Wyckoff's W-25A.....	103.5	20.5	98	82
Wyffels W-600.....	105.3	19.4	100	73
Average of all entries.....	117.3	18.7	97	87
Difference necessary for significance.....	16.2	....	10.7	14.8

Table 4.—WEST NORTH-CENTRAL ILLINOIS: Galesburg

(Performance data of highest-yielding hybrid and of all hybrids
not significantly lower in yield are shown in **boldface type**)

Entry	Total acre yield	Moisture in grain at harvest	Erect plants	Stand	Dropped ears
SUMMARY: 1954-1956					
	<i>bu.</i>	<i>percl.</i>	<i>percl.</i>	<i>percl.</i>	<i>percl.</i>
Holmes 39.....	121.2	21.4	91	86	...
Pioneer 313B.....	121.2	21.9	83	86	...
Schwenk S-34.....	120.3	20.2	96	92	...
Moews 520.....	117.1	21.6	93	86	...
Tiemann T-78.....	116.6	19.5	89	92	...
Schwenk S-24.....	116.4	20.3	92	92	...
Producers 13-1.....	116.3	21.1	92	90	...
Funk's G-95A.....	116.0	20.7	94	86	...
Pioneer 316 ^a	115.9	20.8	94	91	...
Funk's G-95.....	115.8	21.0	95	90	...
Moews 524.....	115.6	19.5	97	92	...
Null N-83.....	115.4	20.9	89	89	...
P.A.G. 403.....	115.3	21.8	95	92	...
Illinois 21 (Dittmer).....	114.5	20.7	93	92	...
Pioneer 329 ^b	113.5	18.5	96	90	...
Illinois 1831 (Station).....	112.8	21.0	90	91	...
Producers 940.....	110.9	20.1	94	85	...
Sieben S-320.....	110.2	18.6	92	90	...
P.A.G. 383.....	109.6	20.4	93	89	...
P.A.G. 347.....	109.0	18.9	94	88	...
Illinois 1570 ^c	108.6	19.8	91	91	...
Sieben S-340.....	108.6	18.5	90	87	...
Moews 523.....	108.2	20.8	93	85	...
Huey H-23.....	107.6	20.6	92	89	...
Doubet D-25.....	106.9	20.7	94	87	...
Sieben S-360.....	106.6	20.7	95	89	...
Ainsworth X-21.....	106.3	18.7	91	89	...
Crow's 407.....	105.7	20.3	94	87	...
P.A.G. 303.....	105.3	19.4	95	90	...
Bear OK-24.....	104.7	22.1	93	90	...
Null N-68.....	104.5	20.1	91	83	...
DeKalb 837.....	104.4	21.5	95	87	...
Moews 550.....	103.4	19.2	95	83	...
Crow's 608.....	101.0	20.3	93	83	...
Stewart S-60.....	100.0	21.3	95	90	...
Average of all entries.....	111.0	20.4	93	89	...
Difference necessary for significance.....	14.6	1.8	6.4	5.6	...
1956 RESULTS					
AES 702 (Station).....	120.6	14.6	90	90	2
Ainsworth X-13-3.....	122.7	14.6	88	88	0
Ainsworth X-21.....	123.2	13.5	92	85	0
Appl A-130.....	112.4	14.7	93	85	2
Appl A-159.....	89.6	17.5	92	88	0
Appl A-259.....	116.4	17.3	93	84	1
Bear OK-24.....	121.3	16.8	90	82	0
Bear OK-96.....	133.7	17.4	88	87	0
Crow's Deep Root.....	117.0	14.5	94	80	0
Crow's 407.....	110.2	15.3	93	83	0
Crow's 432.....	108.9	13.7	94	80	0
Crow's 608.....	115.5	14.3	89	79	0

^a Average of Pioneer 9212 in 1954, and Pioneer 316 in 1955 and 1956.^b Average of Pioneer X0101 in 1954, and Pioneer 329 in 1955 and 1956.^c Average of Illinois 1570 (Graham) 1954, and Illinois 1570 (Dittmer) 1955 and 1956.

(Table is continued on next page)

Table 4. — WEST NORTH-CENTRAL ILLINOIS:
Galesburg — continued

Entry	Total acre yield	Moisture in grain at harvest	Erect plants	Stand	Dropped ears
1956 RESULTS — continued					
	<i>bu.</i>	<i>perct.</i>	<i>perct.</i>	<i>perct.</i>	<i>perct.</i>
DeKalb A-8.....	125.9	16.1	97	88	2
DeKalb 623.....	112.8	14.5	94	83	0
DeKalb 632.....	109.2	14.7	99	86	2
DeKalb 665.....	117.9	15.5	98	89	0
DeKalb 803.....	105.5	17.0	88	76	0
DeKalb 805.....	128.6	14.4	71	85	0
DeKalb 807.....	129.0	15.2	98	90	0
DeKalb 811.....	128.6	15.1	96	79	0
DeKalb 820.....	129.5	15.5	92	86	0
DeKalb 837.....	113.5	16.3	96	83	0
Doubet D-25.....	133.5	14.6	95	86	1
Doubet D-41.....	129.9	14.1	100	90	0
Funk's G-75A.....	124.6	14.7	98	90	0
Funk's G-76.....	120.6	15.2	93	87	1
Funk's G-95.....	127.3	15.2	97	90	1
Funk's G-95A.....	125.6	15.5	95	84	0
Holden H-56.....	139.5	14.8	99	90	0
Holden H-433.....	119.8	15.0	95	86	0
Holden H-532.....	116.9	17.6	98	87	0
Holmes 39.....	119.1	15.0	92	82	0
Holmes 59.....	125.4	14.5	94	90	0
Huey H-23.....	128.8	14.3	91	93	1
Huey H-42.....	128.4	14.0	98	90	0
Hulting 242.....	125.0	13.3	94	88	1
Hulting 380B.....	136.2	14.7	92	84	2
Hulting 481.....	132.0	15.0	93	88	0
Hulting 680.....	123.4	14.7	87	88	0
Illinois 21 (Dittmer).....	132.3	14.6	92	87	0
Illinois 274-1 (Station).....	132.4	14.3	88	88	0
Illinois 972A-1 (Station).....	129.9	14.4	92	92	0
Illinois 1091A (Station).....	120.0	13.9	95	85	1
Illinois 1246 (Station).....	128.8	13.3	96	86	0
Illinois 1421 (Station).....	129.2	15.2	90	87	2
Illinois 1570 (Dittmer).....	122.9	15.0	91	92	3
Illinois 1617 (Station).....	132.1	15.0	90	92	1
Illinois 1831 (Station).....	120.8	15.2	81	87	2
Illinois 1902 (Station).....	117.3	14.6	90	89	0
Illinois 1912 (Station).....	128.7	14.3	87	86	2
Illinois 1936 (Station).....	109.6	15.2	91	86	1
Keystone 48.....	134.8	16.2	92	95	3
Moews 520.....	142.1	15.6	95	86	0
Moews 523.....	131.5	15.0	95	84	1
Moews 524.....	137.8	14.1	99	90	0
Moews 524A.....	126.2	15.6	94	89	2
Moews 550.....	116.8	13.6	95	79	0
Moews 5074.....	124.2	14.7	90	84	2
Monier 12.....	121.2	15.1	80	88	1
Mountjoy M-64.....	129.3	13.6	83	88	0
Munson M15.....	135.7	13.5	97	90	0
Munson M119.....	134.9	14.6	96	86	1
Null N-68.....	119.0	14.6	87	80	0
Null N-83.....	130.2	13.8	80	92	3
Null N-100.....	108.9	17.0	94	86	0
Ohio C-92 (Station).....	128.1	13.4	93	92	0
P.A.G. 290.....	104.3	13.0	88	88	0
P.A.G. 303.....	123.6	14.4	92	91	0
P.A.G. 347.....	123.3	13.5	99	88	2

(Table is concluded on next page)

Table 4.—WEST NORTH-CENTRAL ILLINOIS:
Galesburg — concluded

Entry	Total acre yield	Moisture in grain at harvest	Erect plants	Stand	Dropped ears
1956 RESULTS — concluded					
	<i>bu.</i>	<i>percl.</i>	<i>percl.</i>	<i>percl.</i>	<i>percl.</i>
P.A.G. 351.....	124.5	14.1	97	88	1
P.A.G. 377.....	122.4	13.8	90	88	1
P.A.G. 381.....	132.1	13.7	88	92	0
P.A.G. 383.....	116.4	15.0	89	84	0
P.A.G. 401.....	123.7	14.3	92	82	1
P.A.G. 403.....	138.6	14.4	94	91	0
P.A.G. 444.....	117.8	18.8	83	85	1
Pioneer 301B.....	129.6	14.5	96	94	1
Pioneer 306B.....	123.8	15.3	91	91	0
Pioneer 312A.....	123.7	18.5	96	89	0
Pioneer 313B.....	127.2	16.1	94	86	0
Pioneer 316.....	135.6	15.3	93	92	0
Pioneer 317A.....	124.9	15.3	97	84	3
Pioneer 329.....	119.8	12.7	95	89	1
Pioneer 345.....	123.4	13.0	92	92	1
Pioneer 6727.....	142.3	16.1	95	90	0
Producers 13-1.....	138.9	13.9	87	92	2
Producers 510.....	123.3	13.8	95	88	0
Producers 921.....	136.5	14.7	92	93	0
Producers 940.....	121.4	14.5	95	79	2
Producers 946.....	112.4	16.1	95	84	0
Robe 11.....	128.3	15.5	97	92	1
Robe 30.....	131.5	16.1	95	86	2
Schwenk S-24.....	129.9	15.0	94	91	0
Schwenk S-25B.....	123.6	14.9	98	91	0
Schwenk S-34.....	143.5	15.0	95	92	0
Sieben S-320.....	120.1	14.6	90	87	0
Sieben S-340.....	118.3	13.9	89	82	0
Sieben S-360.....	121.6	15.6	94	88	1
Stewart S-56B.....	122.6	15.3	95	87	0
Stewart S-60.....	106.2	14.5	93	86	1
Stiegelmeier S-300A Hi-B-Jack.....	104.8	14.5	77	86	0
Stiegelmeier S-300B Hi-B-Jack.....	117.8	15.5	85	87	0
Stiegelmeier S-396.....	123.7	17.8	89	82	0
Super-Crost 660.....	123.0	15.7	88	88	0
Tiemann T-68.....	141.2	13.9	97	92	0
Tiemann T-78.....	125.2	14.1	82	90	1
Tomco 812.....	104.3	14.8	97	79	1
Tomco 8080.....	124.2	16.0	96	86	2
Trisler T-19B.....	127.7	15.4	88	84	0
Trisler T-32.....	134.3	14.5	88	88	0
Trisler T-32B.....	121.4	15.0	98	84	0
Trisler T-33.....	122.0	14.8	93	84	1
Trisler T-33B.....	129.4	14.7	92	89	0
Troyer L-14T.....	135.8	16.0	99	83	1
Troyer M-11T.....	125.7	15.6	93	82	2
Troyer M-12T.....	105.6	16.2	98	83	0
Troyer M-13T.....	126.9	14.4	100	88	0
Troyer M-15T.....	111.0	14.8	98	88	6
Troyer M-17T.....	109.2	15.5	100	86	0
U.S. 13 (Station).....	129.3	14.8	93	88	3
Van Horn VH-98.....	127.6	15.7	96	81	1
Van Horn VH-101.....	136.3	16.6	95	93	0
Whisnand 830.....	129.8	15.8	97	88	0
Whisnand 852.....	133.5	15.5	96	90	0
Wyffels W-600.....	106.4	13.0	85	72	0
Average of all entries.....	124.0	14.9	93	87	.6
Difference necessary for significance.....	24.3	....	11.2	11.4	2.7

Table 5. — EAST NORTH-CENTRAL ILLINOIS: Ashkum

(Performance data of highest-yielding hybrid and of all hybrids not significantly lower in yield are shown in boldface type)

Entry	Total acre yield	Moisture in grain at harvest	Erect plants	Stand
1956 RESULTS				
	<i>bu.</i>	<i>percl.</i>	<i>percl.</i>	<i>percl.</i>
Ainsworth X-13-3.....	123.3	16.8	92	86
Ainsworth X-21.....	109.8	15.0	96	81
Bear OK-24.....	124.3	22.5	96	82
Bear OK-40A.....	119.5	18.0	98	85
Crow's Deep Root.....	123.1	16.5	97	83
Crow's 495.....	105.6	18.3	97	67
Crow's 607.....	125.9	18.4	96	91
Crow's 608.....	122.7	17.1	96	86
DeKalb A-8.....	113.1	18.4	94	70
DeKalb 623.....	102.0	16.4	97	78
DeKalb 632.....	139.8	19.4	96	85
DeKalb 665.....	121.3	18.0	97	83
DeKalb 803.....	119.8	20.2	95	83
DeKalb 805.....	127.6	18.3	100	87
DeKalb 807.....	124.5	18.3	99	76
DeKalb 811.....	125.8	18.5	97	80
DeKalb 820.....	116.2	17.4	90	83
DeKalb 837.....	130.7	21.0	100	92
Frey 425.....	121.5	16.5	100	79
Frey 644.....	129.8	20.4	99	88
Frey 645.....	117.6	16.8	95	82
Frey 692.....	123.2	17.4	99	80
Frey 892.....	130.0	16.4	94	87
Funk's G-76.....	132.4	16.9	96	88
Funk's G-95.....	110.2	16.8	94	72
Funk's G-95A.....	126.2	17.4	98	75
Holden H-322.....	123.6	19.4	98	87
Holden H-433.....	123.1	17.0	99	82
Holden H-532.....	118.1	19.4	97	83
Holmes 19A.....	125.0	15.8	95	88
Holmes 39.....	125.6	19.5	100	79
Holmes 46.....	125.6	17.2	98	77
Hulting 242.....	133.2	15.7	97	81
Hulting 380B.....	129.1	16.6	95	80
Hulting 481.....	126.3	19.6	98	88
Hulting 680.....	105.8	18.3	97	86
Illinois 274-1 (Station).....	133.1	16.8	100	82
Illinois 972A-1 (Station).....	131.4	19.0	96	87
Illinois 1421 (Station).....	128.2	18.8	99	75
Illinois 1617 (Station).....	125.2	18.4	96	86
Keystone 38.....	116.6	16.8	98	80
Moews CB70A.....	125.0	18.5	99	82
Moews CB90.....	125.7	19.6	96	84
Moews CB96.....	116.6	19.5	88	82
Moews 523.....	134.2	18.3	94	89
Moews 524A.....	123.5	20.5	98	84
Munson M13.....	130.0	16.5	96	88
Munson M77.....	118.7	18.4	93	76
Null N-100.....	129.0	19.3	97	89

(Table is concluded on next page)

Table 5. — EAST NORTH-CENTRAL ILLINOIS:
Ashkum — concluded

Entry	Total acre yield	Moisture in grain at harvest	Erect plants	Stand
1956 RESULTS — concluded				
	<i>bu.</i>	<i>percl.</i>	<i>percl.</i>	<i>percl.</i>
P.A.G. 234.....	120.8	15.3	96	88
P.A.G. 290.....	102.4	15.6	96	78
P.A.G. 347.....	121.2	16.6	99	88
P.A.G. 351.....	123.0	16.0	96	86
P.A.G. 377.....	127.6	18.0	95	84
P.A.G. 383.....	123.0	17.4	94	87
P.A.G. 401.....	128.8	18.5	96	89
P.A.G. 403.....	130.4	17.8	97	86
Pioneer 301B.....	131.2	17.8	95	85
Pioneer 306B.....	133.7	16.4	97	82
Pioneer 313B.....	139.6	18.9	85	82
Pioneer 316.....	137.3	18.7	97	91
Pioneer 317A.....	117.9	19.6	100	89
Pioneer 329.....	127.4	16.7	100	79
Pioneer 345.....	109.6	15.4	100	66
Pioneer 354.....	129.8	15.4	98	88
Pioneer 3608.....	120.8	18.6	96	77
Producers 13-1.....	127.1	17.3	99	79
Producers 921.....	132.5	16.5	95	80
Producers 940.....	126.0	17.7	94	86
Producers 946.....	124.0	16.4	99	90
Schwenk S-26.....	134.4	17.5	98	82
Schwenk S-27.....	139.0	19.4	98	86
Smiley M-9.....	122.6	16.5	86	90
Stewart S-56B.....	127.7	19.4	98	87
Stewart S-60.....	106.8	18.3	97	77
Stiegelmeier S-300A Hi-B-Jack.....	115.2	16.6	98	88
Super-Crost 500A.....	127.9	15.8	95	88
Super-Crost 660.....	118.6	17.3	89	83
Super-Crost 670.....	103.6	14.6	98	78
Tiemann T-68.....	132.6	15.3	95	87
Tiemann T-78.....	121.5	19.5	98	82
Tomco 812.....	120.9	20.0	99	78
Tomco 8080.....	117.0	20.3	97	82
Trisler T-19B.....	118.8	18.8	96	78
Trisler T-32B.....	126.4	17.7	99	88
Trisler T-33.....	127.3	15.4	93	88
Troyer L-14T.....	128.8	18.8	97	87
Troyer M-11T.....	131.0	18.8	98	85
Troyer M-12T.....	105.7	19.8	98	80
Troyer M-13T.....	130.6	16.8	100	90
Troyer M-15T.....	121.3	17.4	94	92
Troyer M-17T.....	131.4	18.3	98	82
U.S. 13 (Station).....	137.9	16.4	95	88
Van Horn VH-76.....	118.9	17.8	94	73
Van Horn VH-100.....	122.6	20.5	98	86
Whisnand 804.....	129.7	17.4	93	89
Whisnand 830.....	120.7	19.3	97	77
Wyckoff's W-20.....	121.6	16.9	99	88
Wyckoff's W-25A.....	114.7	20.0	98	84
Wyckoff's W-46A.....	136.8	23.3	90	91
Average of all entries.....	123.8	17.8	96	83
Difference necessary for significance.....	20.1	....	7.7	13.8

Table 6. — EAST-CENTRAL ILLINOIS: Urbana

(Performance data of highest-yielding hybrid and of all hybrids not significantly lower in yield are shown in **boldface type**)

Entry	Total acre yield	Moisture in grain at harvest	Erect plants	Stand	Dropped ears
SUMMARY: 1954-1956					
	<i>bu.</i>	<i>percl.</i>	<i>percl.</i>	<i>percl.</i>	<i>percl.</i>
Holmes 39.....	124.0	18.1	73	94	...
Appl A-159.....	123.4	17.5	85	92	...
Funk's G-95A.....	121.1	16.8	83	92	...
Canterbury 420.....	120.7	18.0	86	94	...
Frey 692.....	120.2	17.6	80	94	...
Bear OK-69.....	119.9	17.7	82	89	...
Pioneer 6727.....	119.7	17.8	71	92	...
Pioneer 316 ^a	119.1	17.2	84	92	...
Bear OK-72.....	118.0	18.4	85	95	...
Holmes 13.....	117.9	17.3	87	93	...
Munson M119.....	117.6	17.9	83	89	...
Appl A-130.....	117.1	16.9	84	90	...
Tiemann T-72.....	117.1	17.3	88	90	...
P.A.G. 173.....	116.6	17.6	83	89	...
Moews 520.....	116.4	17.6	83	93	...
Pioneer 313B.....	115.2	17.8	72	93	...
Trisler T-32B.....	115.2	18.2	87	89	...
Canterbury 400.....	115.0	17.2	84	94	...
Frey 645.....	114.9	17.0	85	91	...
Funk's G-95.....	114.7	16.7	80	91	...
Illinois 1570 ^b	114.6	17.3	79	91	...
AES 805 ^c	114.6	18.6	91	92	...
Frey 892.....	114.3	16.7	86	90	...
Canterbury 404.....	114.1	17.0	81	92	...
Funk's G-91.....	113.3	18.2	88	88	...
Producers 13-1.....	112.8	17.5	84	93	...
Producers 940.....	112.8	17.1	76	94	...
Moews 523.....	112.2	17.8	78	93	...
Ainsworth X-14-3.....	112.1	18.0	82	92	...
Illinois 6021 (Station).....	111.4	17.7	80	90	...
Doubet D-41.....	111.3	17.8	90	92	...
Illinois 1246 ^d	110.9	16.0	80	91	...
Illinois 21 ^e	110.5	16.4	79	86	...
P.A.G. 403.....	110.3	18.1	87	92	...
Pioneer 302.....	110.3	19.5	82	92	...
Crow's 608.....	110.0	17.1	83	92	...
U.S. 13 ^f	109.7	17.2	83	92	...
DeKalb 875.....	108.0	16.7	88	90	...
Southern States Pocohontas.....	107.7	17.1	92	83	...
Keystone 38A.....	106.7	17.1	87	87	...
P.A.G. 351.....	106.5	17.4	83	86	...
Tiemann T-78.....	105.7	16.9	86	90	...
P.A.G. 383.....	105.0	17.2	84	86	...
DeKalb 817A.....	103.0	16.7	81	92	...
Trisler T-32.....	100.5	17.3	83	94	...
Average of all entries.....	113.6	17.4	83	91	...
Difference necessary for significance.....	14.7	1.4	10.0	6.3	...

1956 RESULTS

AES 702 (Mountjoy).....	120.0	15.0	89	92	1
AES 805 (Station).....	128.8	16.6	96	92	5
Ainsworth X-13-3.....	137.4	15.5	90	91	5
Ainsworth X-14-3.....	130.6	15.8	92	95	1
Appl A-130.....	131.2	14.5	97	93	0
Appl A-159.....	137.2	15.0	94	93	3
Appl A-259.....	123.1	15.5	91	85	0

^a Average of Pioneer 9212 in 1954, and Pioneer 316 in 1955 and 1956.^b Average of Illinois 1570 (Mountjoy) 1954, Illinois 1570 (Stone) 1955, and Illinois 1570 (Pfeifer)

1956.

^c Average of AES 805 (Stone) 1954, and AES 805 (Station) 1955 and 1956.^d Average of Illinois 1246 (Mountjoy) 1954, and Illinois 1246 (Station) 1955 and 1956.^e Average of Illinois 21 (Mountjoy) 1954 and 1955, and Illinois 21 (Station) 1956.^f Average of U.S. 13 (Stone) 1954 and 1955, and U.S. 13 (Pfeifer) 1956.

(Table is continued on next page)

Table 6. — EAST-CENTRAL ILLINOIS: Urbana — continued

Entry	Total acre yield	Moisture in grain at harvest	Erect plants	Stand	Dropped ears
1956 RESULTS — continued					
	<i>bu.</i>	<i>perct.</i>	<i>perct.</i>	<i>perct.</i>	<i>perct.</i>
Bear OK-24.....	141.0	16.5	96	92	3
Bear OK-69.....	134.5	15.6	96	94	1
Bear OK-72.....	137.1	17.6	95	92	0
Bear OK-96.....	145.2	16.8	98	88	0
Canterbury 400.....	129.9	15.2	94	94	2
Canterbury 404.....	131.8	14.8	94	93	3
Canterbury 420.....	131.5	15.4	88	96	4
Crow's 607.....	119.3	15.3	90	93	1
Crow's 608.....	122.1	15.0	97	87	1
Crow's 805.....	129.6	15.9	90	91	1
Crow's 821.....	132.8	14.8	97	88	3
DeKalb A-8.....	129.2	12.6	91	91	8
DeKalb 803.....	104.0	16.4	90	81	0
DeKalb 805.....	128.8	15.3	96	88	4
DeKalb 807.....	131.8	15.0	95	87	1
DeKalb 811.....	121.9	15.4	94	93	1
DeKalb 812.....	139.9	17.0	100	93	1
DeKalb 817A.....	105.2	14.2	98	92	3
DeKalb 873.....	116.4	15.4	90	88	4
DeKalb 875.....	123.0	13.0	97	92	4
DeKalb 876.....	128.2	17.4	94	91	0
Doubet D-25.....	122.7	16.2	98	89	1
Doubet D-41.....	132.2	15.4	93	86	0
Frey 645.....	138.3	14.5	94	90	4
Frey 692.....	135.1	15.4	94	95	0
Frey 892.....	136.1	13.0	95	91	0
Funk's G-91.....	138.4	14.8	97	86	1
Funk's G-95.....	121.6	11.9	89	91	8
Funk's G-95A.....	139.4	13.7	95	92	2
Griffith 125-2.....	132.0	16.9	96	88	4
Holden H-322.....	133.0	13.9	96	87	3
Holden H-732.....	132.1	16.4	98	92	3
Holmes 13.....	139.1	14.0	96	90	3
Holmes 39.....	135.0	15.4	96	92	0
Huey H-106.....	130.6	14.7	97	87	5
Huey H-235.....	132.8	14.5	90	91	3
Hulting 380B.....	127.7	16.5	97	91	2
Hulting 680.....	124.0	13.4	98	93	0
Illinois 21 (Station).....	129.1	13.0	91	87	1
Illinois 274-1 (Station).....	141.8	15.0	100	89	1
Illinois 972A-1 (Station).....	142.9	13.5	97	94	3
Illinois 1091 (Mountjoy).....	131.0	15.2	97	97	0
Illinois 1091 (Pfeifer).....	111.0	13.0	91	88	0
Illinois 1246 (Station).....	128.3	12.4	91	89	0
Illinois 1421 (Station).....	133.6	17.0	97	92	3
Illinois 1570 (Pfeifer).....	131.2	14.0	93	93	2
Illinois 1617 (Station).....	115.4	15.7	97	90	4
Illinois 1657 (Station).....	115.0	20.1	90	81	1
Illinois 1813 (Pfeifer).....	136.5	16.8	99	92	5
Illinois 1868 (Station).....	98.4	15.2	96	97	2
Illinois 1893 (Station).....	138.0	14.6	96	90	2
Illinois 1919 (Station).....	128.9	14.5	94	88	2
Illinois 6021 (Station).....	120.1	15.0	91	87	10
Keystone 38A.....	119.6	13.8	98	83	0
Moews 520.....	122.4	16.5	95	90	1
Moews 523.....	132.3	15.8	95	96	3
Moews 524A.....	139.0	17.8	90	90	1
Moews 830.....	120.7	17.5	98	95	3
Munson M15.....	132.8	13.5	99	92	0
Munson M119.....	134.7	16.0	92	93	6
Null N-83.....	126.0	15.6	94	89	3
Ohio C-92 (Nickel).....	132.6	14.4	92	95	1
P.A.G. 173.....	127.8	14.9	94	83	2
P.A.G. 347.....	118.3	12.8	97	80	0
P.A.G. 351.....	125.7	15.8	95	89	2
P.A.G. 383.....	108.2	15.5	94	78	1
P.A.G. 401.....	124.1	13.5	91	90	4

(Table is concluded on next page)

Table 6. — EAST-CENTRAL ILLINOIS: Urbana — concluded

Entry	Total acre yield	Moisture in grain at harvest	Erect plants	Stand	Dropped ears
1956 RESULTS — concluded					
	<i>bu.</i>	<i>perct.</i>	<i>perct.</i>	<i>perct.</i>	<i>perct.</i>
P.A.G. 403.....	119.1	16.6	97	88	3
P.A.G. 444.....	136.0	21.3	98	88	0
P.A.G. 454.....	108.0	20.2	95	84	1
Pioneer 300.....	129.3	14.1	95	88	5
Pioneer 301B.....	126.4	14.5	96	93	4
Pioneer 302.....	120.2	18.5	95	97	1
Pioneer 312A.....	129.1	22.4	99	94	1
Pioneer 313B.....	121.3	16.2	90	91	5
Pioneer 316.....	130.8	14.8	97	94	4
Pioneer 317A.....	125.5	17.4	95	88	0
Pioneer 329.....	121.7	14.5	98	92	2
Pioneer 3608.....	131.6	16.3	97	94	3
Pioneer 6727.....	132.2	15.7	86	91	4
Producers 13-1.....	127.9	15.4	91	97	3
Producers 921.....	136.6	14.2	98	90	3
Producers 940.....	120.6	15.5	95	92	0
Producers 1018.....	125.5	17.8	92	89	3
Schwenk S-34.....	132.3	14.6	97	93	4
Southern States Mohawk.....	118.9	14.6	98	86	1
Southern States Pocohontas.....	125.1	14.2	100	89	3
Stiegelmeier S-300B Hi-B-Jack.....	119.1	16.2	97	85	1
Stiegelmeier S-396.....	130.2	20.2	98	92	2
Stiegelmeier S-600 Hi-Protein.....	126.0	17.6	93	89	2
Super-Crost 850.....	132.7	14.6	95	89	3
Super-Crost 880.....	116.0	15.2	99	89	4
Tiemann T-72.....	130.9	15.4	98	91	1
Tiemann T-78.....	110.0	15.3	93	89	5
Tomco 8585.....	129.8	17.5	96	90	4
Tomco 9292.....	125.9	14.9	95	89	4
Trisler T-19B.....	129.6	14.3	94	94	1
Trisler T-23.....	120.2	11.7	95	90	2
Trisler T-32.....	82.9	15.4	97	96	2
Trisler T-32B.....	133.8	16.0	98	93	0
Trisler T-33.....	127.8	16.6	90	93	2
Trisler T-33B.....	132.9	16.1	97	97	2
Troyer L-11.....	147.1	13.8	96	94	10
Troyer L-13.....	133.2	16.0	99	92	5
Troyer L-14T.....	134.3	17.8	99	96	4
Troyer L-16.....	129.6	17.0	97	95	2
Troyer M-11T.....	137.0	14.8	97	89	8
Troyer M-13T.....	126.0	14.7	97	95	3
U.S. 13 (Pfeifer).....	116.6	14.5	98	94	5
Van Horn VH-76.....	121.7	16.2	94	89	2
Van Horn VH-95-1.....	136.8	18.2	92	88	2
Van Horn VH-97.....	120.7	15.9	98	92	1
Van Horn VH-98.....	128.9	15.2	95	91	1
Van Horn VH-100.....	139.6	14.4	97	88	1
Van Horn VH-101.....	128.6	16.7	91	93	2
Whisnand 830.....	136.2	16.3	95	89	3
Whisnand 851.....	139.1	18.0	96	92	0
Whisnand 852.....	128.2	17.3	95	93	1
Average of all entries.....	127.8	15.6	95	91	2.3
Difference necessary for significance.....	26.8	....	7.1	7.6	4.6

Table 7.—WEST SOUTH-CENTRAL ILLINOIS: Greenfield

(Performance data of highest-yielding hybrid and of all hybrids
not significantly lower in yield are shown in **boldface** type)

Entry	Total acre yield	Moisture in grain at harvest	Erect plants	Stand
1956 RESULTS				
	<i>bu.</i>	<i>perct.</i>	<i>perct.</i>	<i>perct.</i>
Ainsworth X-14-A.....	138.8	15.1	99	96
Ainsworth X-14-3.....	121.2	13.3	100	91
Bear OK-40A.....	118.3	11.8	100	94
Bear OK-69.....	118.6	15.5	100	95
Bear OK-72A.....	126.5	14.1	100	94
Bear OK-96.....	127.4	15.6	100	96
Bruns P-38.....	122.4	13.0	99	91
Canterbury 400.....	128.2	12.8	99	94
Canterbury 420.....	134.8	11.6	99	96
Crow's 805.....	113.0	14.4	100	84
Crow's 821.....	112.4	12.8	100	89
DeKalb 803.....	102.2	14.6	99	94
DeKalb 805.....	129.1	13.7	100	86
DeKalb 811.....	121.1	14.8	99	91
DeKalb 812.....	114.9	13.6	100	90
DeKalb 817A.....	119.6	13.6	100	98
DeKalb 837.....	118.8	14.4	100	94
DeKalb 873.....	119.2	14.8	98	90
DeKalb 876.....	123.5	13.0	100	90
DeKalb 893.....	134.0	20.4	99	92
DeKalb A-8.....	122.0	12.1	96	90
Embro 33.....	117.6	14.3	100	89
Embro 36A.....	111.8	13.5	100	89
Embro 49B.....	113.5	18.8	99	99
Embro 101A.....	113.3	19.2	99	91
Funk's G-91.....	117.0	14.4	100	88
Funk's G-95A.....	124.9	12.4	100	94
Holmes 39.....	118.3	14.0	99	91
Holmes 46.....	121.9	12.4	99	87
Huey H-50.....	108.3	12.4	100	85
Illinois 1337 (Dittmer).....	123.4	12.5	100	94
Illinois 1570 (Bruns).....	115.4	11.9	99	92
Illinois 1570 (Stone).....	115.3	13.5	100	92
Keystone 45.....	133.9	16.2	99	97
Moews 523.....	110.3	14.4	100	88
Moews 524A.....	113.8	13.6	100	95
Moews 814.....	120.5	12.8	100	90
Morton M-6.....	124.1	16.6	100	96
Morton M-12A.....	120.9	10.9	100	90
Morton M-70.....	124.7	13.1	99	97
Morton M-303.....	123.9	13.6	100	98
Ohio C-92 (Station).....	117.3	13.6	99	96
P.A.G. 173.....	128.1	12.1	95	90
P.A.G. 347.....	127.9	12.3	100	96
P.A.G. 351.....	116.3	14.6	100	90
P.A.G. 383.....	112.7	12.5	100	96
P.A.G. 401.....	119.0	12.4	100	98
P.A.G. 403.....	129.3	12.8	100	96
P.A.G. 444.....	124.3	16.2	100	97
P.A.G. 454.....	135.1	18.0	92	81
Pioneer 300.....	113.4	12.7	100	94
Pioneer 301B.....	132.3	12.5	100	99
Pioneer 302.....	128.8	16.5	100	94
Pioneer 312A.....	124.7	16.7	99	92
Pioneer 313B.....	114.6	15.3	100	90
Pioneer 316.....	131.9	12.6	99	99
Pioneer 329.....	114.6	12.2	100	82
Pioneer 332.....	115.7	15.0	100	92
Pioneer 3608.....	119.5	14.1	99	92

(Table is concluded on next page)

Table 7. — WEST SOUTH-CENTRAL ILLINOIS:
Greenfield — concluded

Entry	Total acre yield	Moisture in grain at harvest	Erect plants	Stand
1956 RESULTS — concluded				
	<i>bu.</i>	<i>perct.</i>	<i>perct.</i>	<i>perct.</i>
Pioneer 6727.....	128.5	12.8	100	97
Pocklington P-48.....	125.4	13.0	100	96
Pocklington P-60A.....	109.6	15.8	99	77
Pocklington P-62A.....	123.7	14.0	100	88
Pocklington P-64.....	123.5	14.3	100	95
Pocklington P-66.....	119.5	13.8	100	94
Pocklington P-70.....	134.0	14.0	100	92
Pocklington P-75.....	125.0	14.3	100	92
Pocklington P-75A.....	146.9	16.0	97	88
Pocklington P-78.....	116.3	14.4	100	90
Pocklington P-78A.....	137.3	15.5	100	98
Producers 13-1.....	122.1	13.5	100	95
Producers 921.....	135.8	11.6	100	90
Producers 1018.....	121.3	13.5	99	94
Producers 1022A.....	135.3	15.8	99	96
Producers 1050A.....	119.3	12.4	99	91
Stone 843.....	114.3	14.0	100	75
Super-Crost 700A.....	118.8	12.3	100	89
Super-Crost 840.....	114.5	14.8	99	95
Super-Crost 850.....	112.9	11.8	100	92
Tiemann T-68.....	108.4	11.7	99	88
Tiemann T-72.....	109.9	11.8	100	86
Tiemann T-78.....	125.0	11.8	100	97
Trisler T-32B.....	121.9	14.4	98	88
Trisler T-33B.....	124.6	12.4	100	88
Van Horn VH-76.....	116.9	13.6	99	90
Van Horn VH-97.....	128.0	13.3	100	91
Van Horn VH-101.....	113.8	15.6	100	96
Van Horn VH-110.....	108.9	14.1	100	80
Whisnand 830.....	129.6	13.7	100	91
Whisnand 852.....	145.9	15.4	100	96
Average of all entries.....	121.8	13.8	99	92
Difference necessary for significance.....	17.1	....	2.3	13.1

Table 8. — SOUTHERN ILLINOIS: Brownstown

(Performance data of highest-yielding hybrid and of all hybrids not significantly lower in yield are shown in **boldface** type)

Entry	Total acre yield	Moisture in grain at harvest	Erect plants	Stand
SUMMARY: 1954-1956				
	<i>bu.</i>	<i>percl.</i>	<i>percl.</i>	<i>percl.</i>
Funk's G-91.....	73.3	15.7	72	87
Canterbury 400.....	70.7	14.4	69	94
Munson M119.....	70.1	15.0	69	93
Illinois 1852 (Station).....	69.5	16.9	80	89
Producers 13-1.....	69.2	15.7	68	93
Producers 946.....	68.7	15.5	77	83
Bear OK-72B.....	68.4	16.9	75	95
Pioneer 302.....	67.4	18.0	70	90
Tiemann T-78.....	67.1	14.4	75	88
Tiemann T-72.....	66.8	15.4	71	91
Pioneer 313B.....	66.5	16.4	66	90
Trisler T-33B.....	66.2	16.4	68	87
P.A.G. 631(W).....	66.0	16.5	63	90
Illinois 1511 ^a	65.9	15.4	69	92
Moews CB70A.....	65.6	15.7	77	84
Canterbury 420.....	65.5	15.7	70	90
P.A.G. 383.....	64.8	15.2	72	91
Canterbury 126.....	64.4	14.7	71	89
Pioneer 6727.....	64.4	17.6	69	87
Producers 1018.....	64.0	16.6	72	89
Pioneer 332.....	63.8	17.7	64	92
Whisnand 830.....	63.8	17.2	78	81
Ainsworth X-14-3.....	63.6	16.1	76	91
DeKalb 925(W).....	63.5	17.2	66	94
Bruns P-38.....	63.0	14.2	72	85
Trisler T-32B.....	63.0	17.1	71	83
P.A.G. 173.....	62.3	15.1	73	84
DeKalb 875.....	61.4	16.1	74	87
DeKalb 817A.....	61.3	15.2	76	88
Moews CB60A.....	61.3	17.5	70	85
AES 805 ^b	60.8	16.8	73	85
P.A.G. 403.....	60.6	15.9	74	93
Illinois 1570 ^c	60.4	15.9	70	88
Pioneer 316 ^d	59.9	16.7	75	91
U.S. 13 ^e	57.9	15.2	70	82
Illinois 1656 (Mountjoy).....	57.6	15.7	71	89
Southern States Potomac.....	55.1	15.9	62	92
Average of all entries.....	64.4	16.0	71	89
Difference necessary for significance.....	12.8	2.0	9.2	8.8

1956 RESULTS

AES 805 (Station).....	99.9	18.4	99	91
Ainsworth X-14-A.....	95.2	17.8	96	94
Ainsworth X-14-3.....	93.1	15.1	97	92
Appl A-159.....	98.3	16.2	94	90
Appl A-259.....	91.8	15.8	100	92
Bear OK-69.....	110.1	18.1	99	90
Bear OK-72B.....	97.8	19.1	99	90
Bear OK-878.....	105.3	17.0	98	92
Bruns P-38.....	94.2	15.1	98	94
Canterbury 126.....	90.9	13.5	99	88
Canterbury 400.....	102.8	14.5	96	96
Canterbury 420.....	90.4	17.4	99	87
DeKalb 803.....	74.7	18.9	99	79
DeKalb 811.....	99.2	14.4	99	90
DeKalb 812.....	75.9	16.2	100	85
DeKalb 817A.....	89.6	15.0	99	92
DeKalb 873.....	106.1	17.8	98	92

^a Average of Illinois 1511 (Appl) 1954 and 1955, and Illinois 1511 (Station) 1956.

^b Average of AES 805 (Graham) 1954, and AES 805 (Station) 1955 and 1956.

^c Average of Illinois 1570 (Bruns) 1954 and 1955, and Illinois 1570 (Pfeifer) 1956.

^d Average of Pioneer 9212 in 1954, and Pioneer 316 in 1955 and 1956.

^e Average of U.S. 13 (Graham) 1954, U.S. 13 (Station) 1955, and U.S. 13 (Pfeifer) 1956.

(Table is concluded on next page)

Table 8. — SOUTHERN ILLINOIS: Brownstown — concluded

Entry	Total acre yield	Moisture in grain at harvest	Erect plants	Stand
1956 RESULTS — concluded				
	<i>bu.</i>	<i>percl.</i>	<i>percl.</i>	<i>percl.</i>
DeKalb 875.....	88.5	17.6	98	86
DeKalb 876.....	94.8	16.9	98	91
DeKalb 893.....	101.2	18.6	97	92
DeKalb 898.....	101.2	15.2	97	94
DeKalb 925(W).....	96.1	17.2	99	91
Funk's G-91.....	99.6	16.0	97	86
Funk's G-95A.....	96.6	14.9	100	91
Holden H-56.....	110.4	17.1	100	94
Illinois 1511 (Station).....	100.1	14.9	99	94
Illinois 1570 (Station).....	95.6	16.2	96	87
Illinois 1570 (Pfeifer).....	87.0	17.5	96	89
Illinois 1656 (Mountjoy).....	94.3	16.1	98	94
Illinois 1657 (Station).....	96.4	17.5	96	81
Illinois 1813 (Pfeifer).....	95.8	18.8	98	85
Illinois 1851 (Station).....	96.2	19.1	99	92
Illinois 1852 (Station).....	93.7	16.3	99	93
Illinois 1868 (Station).....	94.2	17.1	100	85
Keystone 107(W).....	85.9	21.4	94	86
Moews CB60A.....	96.3	19.4	99	88
Moews CB70A.....	98.4	17.2	99	90
Moews CB90.....	99.5	15.1	99	84
Moews CB90A.....	92.4	16.8	100	91
Munson M119.....	98.8	15.2	99	94
Ohio C-92 (Station).....	86.4	15.0	100	86
P.A.G. 173.....	93.3	15.7	99	87
P.A.G. 383.....	94.8	14.4	100	94
P.A.G. 401.....	94.5	15.5	99	90
P.A.G. 403.....	90.4	15.8	99	92
P.A.G. 444.....	102.8	17.5	98	84
P.A.G. 454.....	95.2	18.6	99	90
P.A.G. 485.....	90.5	19.5	95	89
P.A.G. 631(W).....	96.7	17.8	97	90
P.A.G. 633(W).....	91.2	19.5	98	90
Pioneer 300.....	94.6	15.9	95	86
Pioneer 301B.....	92.1	16.2	99	88
Pioneer 302.....	107.0	18.8	97	96
Pioneer 312A.....	98.0	20.2	100	92
Pioneer 313B.....	98.7	14.8	95	91
Pioneer 316.....	93.8	16.7	99	92
Pioneer 332.....	90.8	18.5	97	91
Pioneer 3608.....	102.9	16.4	99	86
Pioneer 6727.....	100.3	16.8	97	90
Pioneer 8886.....	104.9	18.4	100	91
Producers 13-1.....	99.8	14.6	91	94
Producers 940.....	75.3	16.1	95	96
Producers 946.....	98.5	16.3	99	87
Producers 1018.....	95.9	18.6	98	93
Producers 1022A.....	95.8	18.5	94	92
Southern States Potomac.....	88.6	15.4	93	91
Super-Crost 700A.....	99.5	14.3	99	90
Super-Crost 850.....	79.8	13.8	99	93
Tiemann T-72.....	92.8	15.5	100	87
Tiemann T-78.....	93.7	14.6	98	87
Trisler T-23.....	96.6	13.7	99	95
Trisler T-32.....	93.5	18.2	99	92
Trisler T-32B.....	100.9	18.0	99	89
Trisler T-33.....	90.8	16.1	97	87
Trisler T-33B.....	100.9	17.6	91	92
U.S. 13 (Pfeifer).....	94.1	15.5	97	90
Van Horn VH-76.....	94.5	15.8	97	94
Van Horn VH-100.....	104.7	16.4	99	87
Van Horn VH-121.....	94.4	21.7	99	87
Whisnand 830.....	88.2	19.3	100	84
Whisnand 852.....	91.6	18.7	98	92
Average of all entries.....	95.3	16.7	98	90
Difference necessary for significance.....	17.2	....	12.3	8.2

**Table 9. — EXTREME SOUTHERN ILLINOIS:
Eldorado 1954, Carbondale 1955, Wolf Lake 1956**

(Performance data of highest-yielding hybrid and of all hybrids
not significantly lower in yield are shown in **boldface type**)

Entry	Total acre yield	Moisture in grain at harvest	Erect plants	Stand
SUMMARY: 1954-1956				
	<i>bu.</i>	<i>perct.</i>	<i>perct.</i>	<i>perct.</i>
P.A.G. 631(W).....	96.4	18.4	96	89
Ainsworth X-14-A.....	95.5	17.0	89	89
DeKalb 925(W).....	93.2	20.0	97	90
Stull 400(W).....	92.9	17.0	96	91
Moews CB60A.....	92.0	17.2	96	86
Whisnand 851.....	91.6	18.5	96	91
Tiemann T-78.....	91.1	16.3	99	94
Producers 1018.....	90.7	16.3	96	93
Pioneer 6727.....	90.5	17.8	95	89
U.S. 13 ^a	89.5	16.5	97	91
Moews CB90A.....	89.2	17.2	94	88
Tiemann T-72.....	88.9	16.2	98	89
Funk's G-704.....	88.6	19.2	96	83
Illinois 1852 (Station).....	88.0	17.3	97	88
Funk's G-711.....	87.9	21.0	91	90
Pioneer 316 ^b	87.5	16.7	94	94
AES 805 ^c	86.2	16.7	98	88
Pioneer 302.....	85.4	18.0	98	91
DeKalb 898.....	84.4	17.2	97	91
Pioneer 313B.....	83.7	16.9	89	91
DeKalb 875.....	82.6	17.1	92	89
P.A.G. 403.....	81.0	15.9	96	89
Average of all entries.....	88.6	17.5	96	90
Difference necessary for significance.....	17.0	1.6	5.1	7.4
1956 RESULTS				
AES 805 (Station).....	103.3	13.7	100	79
Ainsworth X-14-A.....	119.0	14.6	91	87
Bear OK-72A.....	95.6	13.9	100	92
Bear OK-890.....	112.2	13.8	100	91
DeKalb 817A.....	99.7	14.1	96	91
DeKalb 873.....	91.6	14.2	94	87
DeKalb 875.....	94.3	14.4	100	88
DeKalb 876.....	101.4	13.8	97	87
DeKalb 893.....	107.5	16.3	99	91
DeKalb 896.....	108.4	14.6	99	87
DeKalb 898.....	99.4	14.5	100	90
DeKalb 925(W).....	107.7	15.4	100	85
DeKalb 1023.....	124.0	16.0	99	94
DeKalb 1024.....	134.8	15.6	99	94
Funk's G-704.....	96.5	15.4	97	82
Funk's G-706.....	104.6	13.8	99	91
Funk's G-711.....	108.3	16.8	97	94
Hunerkoch H-34.....	102.9	13.3	100	91
Hunerkoch H-40.....	90.7	15.2	100	79
Hunerkoch H-48.....	100.5	16.3	100	84
Illinois 1511 (Station).....	110.2	13.6	98	90
Illinois 1570 (Station).....	108.5	13.6	96	84
Illinois 1617 (Station).....	96.5	13.1	96	89
Illinois 1657 (Station).....	101.2	14.2	100	79
Illinois 1852 (Station).....	107.2	13.1	98	80
Illinois 1868 (Station).....	114.4	13.8	100	89
Illinois 1913 (Station).....	108.8	13.0	99	90
Illinois 1919 (Station).....	104.7	13.1	100	84
Illinois 2214(W) (Station).....	112.8	14.7	98	95

^a Average of U.S. 13 (Graham) 1954, and U.S. 13 (Station) 1955 and 1956.

^b Average of Pioneer 9212 in 1954, and Pioneer 316 in 1955 and 1956.

^c Average of AES 805 (Graham) 1954, and AES 805 (Station) 1955 and 1956.

(Table is concluded on next page)

Table 9. — EXTREME SOUTHERN ILLINOIS: Eldorado 1954,
Carbondale 1955, Wolf Lake, 1956 — concluded

Entry	Total acre yield	Moisture in grain at harvest	Erect plants	Stand
1956 RESULTS — concluded				
	<i>bu.</i>	<i>percl.</i>	<i>percl.</i>	<i>percl.</i>
Keystone 256.....	110.4	16.2	95	74
Moews CB60A.....	112.2	13.8	99	88
Moews CB70A.....	106.0	13.3	94	91
Moews CB90.....	87.7	13.4	99	92
Moews CB90A.....	114.5	14.5	94	94
Moews CB100A.....	102.2	14.5	100	85
Ohio C-92 (Station).....	100.9	14.9	100	91
P.A.G. 401.....	97.0	13.3	100	88
P.A.G. 403.....	100.2	13.6	99	86
P.A.G. 444.....	97.2	13.4	100	88
P.A.G. 454.....	108.7	14.5	100	90
P.A.G. 485.....	102.0	14.8	99	90
P.A.G. 631(W).....	111.2	14.8	96	88
P.A.G. 633(W).....	104.8	15.4	100	87
Pioneer 300.....	107.8	13.8	99	88
Pioneer 301B.....	97.2	14.4	100	80
Pioneer 302.....	109.9	15.1	100	95
Pioneer 312A.....	107.4	16.7	97	89
Pioneer 313B.....	95.7	14.4	91	88
Pioneer 316.....	92.3	14.7	93	90
Pioneer 332.....	109.4	13.9	100	88
Pioneer 3608.....	105.0	13.4	99	91
Pioneer 6727.....	111.9	14.4	100	92
Producers 1018.....	105.4	13.8	100	96
Producers 1022A.....	100.8	14.4	100	95
Producers 1050A.....	89.2	14.1	100	95
Stall 100V.....	84.8	14.4	100	90
Stall 101V.....	101.7	15.4	100	91
Stall 400(W).....	114.8	13.6	100	85
Super-Crost 1005A.....	116.5	14.3	98	94
Tiemann T-72.....	103.4	13.4	99	88
Tiemann T-78.....	108.0	14.1	100	94
Trisler T-23.....	95.7	14.2	95	79
Trisler T-32.....	103.9	14.1	100	87
Trisler T-32B.....	101.8	13.8	100	94
Trisler T-33.....	103.4	14.4	100	96
Trisler T-33B.....	99.1	14.3	99	90
U.S. 13 (Station).....	111.6	14.0	100	94
Van Horn M66Y.....	109.7	14.6	99	89
Van Horn VH-55(W).....	106.1	15.3	100	91
Van Horn VH-121.....	96.7	15.6	100	82
Whisnand 830.....	114.1	14.2	100	92
Whisnand 851.....	102.7	15.1	99	94
Average of all entries.....	104.5	14.3	98	89
Difference necessary for significance.....	20.1	....	5.6	12.6

SUMMARY

In 1956, 352 hybrids were grown on seven test fields in Illinois. Growing conditions were exceptionally favorable, and record yields were produced at all test locations.

1956 yields. The Urbana test field, in east-central Illinois, had the highest average yield, 127.8 bushels per acre. Average yields on the other test fields were: DeKalb 117.3, Galesburg 124.0, Ashkum 123.8, Greenfield 121.8, Brownstown 95.3, and Wolf Lake 104.5.

The average yield of all hybrids tested was 116.4 bushels. This was by far the highest average on record for these tests. The average yield for the five test locations comparable with the 1955 locations was 27 percent higher than the 1955 average and 24 percent higher than the previous record average set in 1948. Each test location produced the highest average yield in the history of performance testing in its comparable area.

Three-year summaries, 1954-1956. The highest-yielding hybrids in the three-year summaries were the following:

Northern Illinois — Hulting 238, Pioneer 354, P.A.G. 277, Sieben S-340, Frey 410, P.A.G. 244.

West North-Central — Holmes 39, Pioneer 313B, Schwenk S-34, Moews 520, Tiemann T-78, Schwenk S-24.

East-Central — Holmes 39, Appl A-159, Funk's G-95A, Canterbury 420, Frey 692, Bear OK-69.

Southern — Funk's G-91, Canterbury 400, Munson M119, Illinois 1852 (Station), Producers 13-1, Producers 946.

Extreme Southern — P.A.G. 631(W), Ainsworth X-14-A, DeKalb 925(W), Stull 400(W), Moews CB60A, Whisnand 851.

Single-year averages, 1956. Two test locations, Ashkum and Greenfield, were included in the testing program for the first time in 1956. The six highest-yielding hybrids in each of these two tests were the following:

East North-Central — DeKalb 632, Pioneer 313B, Schwenk S-27, U.S. 13 (Station), Pioneer 316, Wyckoff W-46A.

West South-Central — Pocklington P-75A, Whisnand 852, Ainsworth X-14-A, Pocklington P-78A, Producers 921, Producers 1022A.

Lodging. Nearly all plants were erect at harvest in every test field; the general average for all hybrids tested was 97 percent plants

erect at harvest. Statistically significant differences between hybrids in lodging were observed at Galesburg, Ashkum, Urbana, and Greenfield.

Moisture. The moisture content of the grain at harvest was far below normal, averaging 16.0 percent for all hybrids tested. The grain of most hybrids at Greenfield and Wolf Lake, and many at Galesburg, was dry enough at harvest to have been sold directly as No. 1 corn. Despite the fact that harvest of the test plots was completed by November 1, only a few hybrids at the two northernmost test locations had moisture contents as high as 20 percent at harvest.

Stand. Stands were generally good to excellent at all locations. The average stand for all entries tested was 88 percent, which compared favorably with average stand percentages in preceding years of the tests. Statistically significant differences between hybrids in stand percentages were found at DeKalb, Urbana, and Brownstown.

CONTRIBUTORS OF SEED

AES Hybrids.....	AES 702 (Ill. Agr. Exp. Sta.; Mountjoy)
	AES 805 (Ill. Agr. Exp. Sta.)
Ainsworth Hybrids.....	Ainsworth Seed Co..... Mason City
Appl Hybrids.....	Appl's Hybrid Seed Co..... St. Joseph
Bear Hybrids.....	Bear Hybrid Corn Co..... Decatur, Box 628
Bruns Hybrids.....	Bruns Bros. Seed Co..... Camp Point
Canterbury Hybrids.....	C. E. Canterbury Seed Co..... Cantrall
Crow's Hybrids.....	Crow's Hybrid Corn Co..... Milford
DeKalb Hybrids.....	DeKalb Agriculture Assn., Inc..... DeKalb
Doubet Hybrids.....	E. W. Doubet..... Hanna City
Embro Hybrids.....	Ed. F. Mangelsdorf and Bro., Inc... St. Louis, Box 327
Frey Hybrids.....	Frey Hybrid Corn Co..... Gilman
Funk's Hybrids.....	Funk Bros. Seed Co..... Bloomington
Griffith Hybrids.....	Griffith Seed Co..... Bloomington
Holden Hybrids.....	Roland Holden..... Williamsburg, Iowa
Holmes Hybrids.....	Holmes Hybrids..... Edelstein
Huebsch Hybrids.....	L. A. Huebsch and Son..... Mundelein
Huey Hybrids.....	Huey Seed Co..... Carthage
Hulting Hybrids.....	G. E. Hulting and Son..... Geneseo
Hunerkoch Hybrids.....	Hunerkoch Seed Co..... Metropolis
Illinois Hybrids.....	Ill. 21 (Dittmer Seeds, Carthage; Ill. Agr. Exp. Sta.)
	Ill. 101 (Huebsch)
	Ill. 274-1, 972A-1 (Ill. Agr. Exp. Sta.)
	Ill. 1091 (Mountjoy; G. L. Pfeifer, Arcola)
	Ill. 1091A, 1246 (Ill. Agr. Exp. Sta.)
	Ill. 1277 (A. I. Coldwater and Son, Elwood; Nichols Bros.)
	Ill. 1280 (Coldwater)
	Ill. 1337 (Dittmer)
	Ill. 1421, 1511 (Ill. Agr. Exp. Sta.)
	Ill. 1570 (Bruns, Dittmer, Ill. Agr. Exp. Sta., Pfeifer, Stone)
	Ill. 1617 (Ill. Agr. Exp. Sta.)
	Ill. 1656 (Mountjoy)
	Ill. 1657 (Ill. Agr. Exp. Sta.)
	Ill. 1813 (Pfeifer)
	Ill. 1831, 1851, 1852, 1868, 1893, 1902, 1913, 1919, 1936, 2214W, 6021 (Ill. Agr. Exp. Sta.)
Keystone Hybrids.....	Corneli Seed Co..... 101 Choteau Ave., St. Louis, Mo.

Moews Corn Belt Hybrids..	Moews Corn Belt Co., Inc.....	Boswell, Indiana
Moews Hybrids.....	Moews Seed Co.....	Granville
Monier Hybrids.....	Monier Hybrids.....	Sparland
Morton Hybrids.....	Roy A. Morton and Sons.....	Bowen
Mountjoy Hybrids.....	Mountjoy Hybrid Seed Co.....	Atlanta
Munson Hybrids.....	Munson Hybrids.....	Galesburg
Nichols Hybrids.....	Nichols Bros.....	Hebron
Null Hybrids.....	Null Seed Farms.....	Colchester
Ohio Hybrids.....	Ohio C-92 (R. E. Nickel and Sons, Concord; Ill. Agr. Exp. Sta.)	
P.A.G. Hybrids.....	Pfister Assoc. Growers, Inc.....	Aurora
Pioneer Hybrids.....	Pioneer Hi-Bred Corn Co. of Ill....	Princeton
Pocklington Hybrids.....	Pocklington Bros.....	Girard
Producers Hybrids.....	Producers Seed Co.....	Piper City
Robe Hybrids.....	Robe Hybrid Seed Co.....	Smithshire
Schwenk Hybrids.....	W. T. Schwenk and Sons.....	Edwards
Sieben Hybrids.....	Sieben Hybrids.....	Geneseo
Smiley Hybrids.....	Glen Smiley.....	Milford
Southern States Hybrids..	Coop. Seed and Farm Supply Co..	Muncie
Steckley Hybrids.....	Steckley Hybrid Corn Co.....	2416 N. St., Lincoln, Nebr.
Stewart Hybrids.....	Frank S. Stewart & Son.....	Princetonville
Stiegelmeier Hybrids.....	H. L. Stiegelmeier.....	Normal
Stone Hybrids.....	Roland G. Stone.....	Pleasant Plains
Stull Hybrids.....	Stull Corn Co.....	Seebree, Ky.
Super-Crost Hybrids.....	E. J. Funk and Sons.....	Kentland, Ind.
Tiemann Hybrids.....	Tiemann Seed Co.....	Bloomington
Tomahawk Hybrids.....	Tomahawk Hybrid Seed Co.....	Belmond, Iowa
Tomco Hybrids.....	Tomahawk Hybrid Seed Co.....	Belmond, Iowa
Trisler Hybrids.....	Trisler Seed Farms.....	Fairmount
Troyer Hybrids.....	C. E. Troyer.....	LaFontaine, Ind.
United-Hagie Hybrids.....	United-Hagie Hybrids, Inc.....	Ames, Iowa
U.S. Hybrids.....	U.S. 13 (Pfeifer; Ill. Agr. Exp. Sta.)	
Van Horn Hybrids.....	Van Horn Hybrids, Inc.....	Cerro Gordo
Whisnand Hybrids.....	Whisnand Hybrid Corn Co.....	Arcola
Wyckoff Hybrids.....	Wyckoff Hybrid Corn Co.....	Valparaiso, Ind.
Wyffels Hybrids.....	William Wyffels.....	Geneseo

PEDIGREES OF 33 HYBRIDS

Following is a list of open-pedigree hybrids whose performance is shown in this bulletin.

AES 702.. (WF9×Hy2)(C103×M14)	Ill. 1657. . . (K201×CI.21E)(K4×Oh7)
AES 805. . (WF9×38-11)(C103×Oh45)	Ill. 1813. . . (WF9×Hy2)(C103×Oh45)
Ill. 21. . . (WF9×38-11)(Hy2×187-2)	Ill. 1831. . . (WF9×W146)(K237×Oh45) ¹
Ill. 101. . . (WF9×M14)(187-2×W26)	Ill. 1851. . . (C103×38-11)(Oh7×CI.21E)
Ill. 274-1. . (WF9×Hy2)(Oh7×187-2)	Ill. 1852. . . (CI.21E×C103)(38-11×Oh7)
Ill. 972A-1. (WF9×Oh7)(Hy2×L317)	Ill. 1868. . . (WF9×Hy2)(C103×Oh43)
Ill. 1091. . (WF9×Hy2)(M14×187-2)	Ill. 1893. . . (C103×38-11)(Oh7B×Oh29)
Ill. 1091A.. (WF9×M14)(Hy2×187-2)	Ill. 1902. . . (R141×R139)(R138×R142)
Ill. 1246. . (WF9×38-11)(R61×187-2)	Ill. 1912. . . (WF9×38-11)(R151×R156)
Ill. 1277. . (WF9×M14)(187-2×I.205)	Ill. 1913. . . (WF9×38-11)(R151×R154)
Ill. 1280. . (WF9×M14)(187-2×Os420)	Ill. 1919. . . (WF9×38-11)(R130×R156)
Ill. 1337. . (WF9×38-11)(Hy2×R61)	Ill. 1936. . . (WF9×Hy2)(M14×B14)
Ill. 1421. . (WF9×Hy2)(P8×Oh7)	Ill. 2214(W). (R30×Ky27)(H21×K64)
Ill. 1511. . (WF9×Hy2)(38-11×L304A)	Ill. 6021. . . (R75×R76)(R84×K4)
Ill. 1570. . (WF9×38-11)(Hy2×Oh41)	Ohio C-92... (WF9×38-11)(Hy2×Oh7)
Ill. 1617. . (WF9×B10)(Oh7×Oh41)	U.S. 13. . . . (WF9×38-11)(Hy2×L317)
Ill. 1656. . (WF9×38-11)(Hy2×C103)	

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